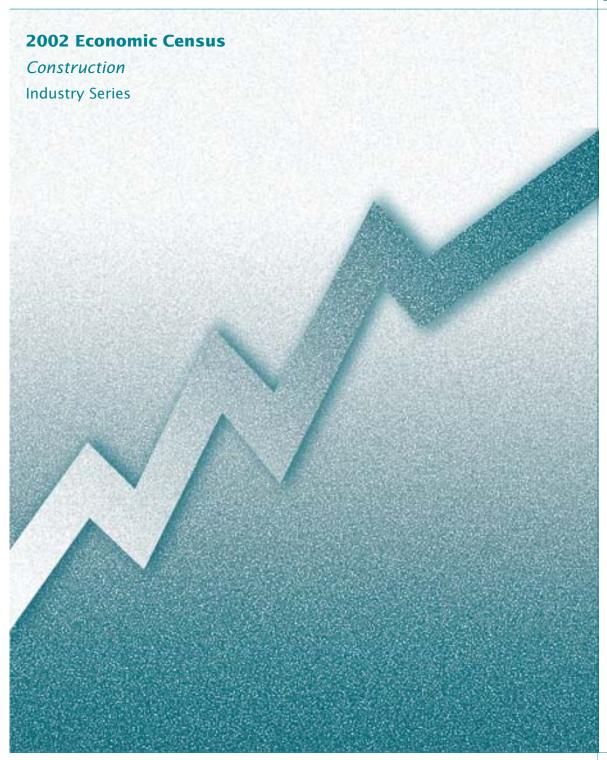
# New Housing Operative Builders: 2002

Issued December 2004

EC02-23I-236117





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### **2002 Economic Census**

Construction
Industry Series





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-- Not applicable for this report.

## Introduction to the Economic Census

#### PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in "2" and "7."

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the federal government use the data to monitor economic activity and to assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

#### INDUSTRY CLASSIFICATIONS

Data from the 2002 Economic Census are published primarily according to the 2002 North American Industry Classification System (NAICS). NAICS was first adopted in the United States, Canada, and Mexico in 1997. The 2002 Economic Census covers the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Food Services
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), largely covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 100 subsectors (three-digit codes), 317 industry groups (four-digit codes), and, as implemented in the United States, 1,179 industries (six-digit codes).

#### RELATIONSHIP TO HISTORICAL INDUSTRY CLASSIFICATIONS

Prior to the 1997 Economic Census, data were published according to the Standard Industrial Classification (SIC) system. While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The 1997 Economic Census *Bridge Between NAICS and SIC* demonstrates the relationships between NAICS and SIC industries. Where changes are significant, it may not be possible to construct time series that include data for points both before and after 1997.

Most industry classifications remained unchanged between 1997 and 2002, but NAICS 2002 includes substantial revisions within the construction and wholesale trade sectors, and a number of revisions for the retail trade and information sectors. These changes are noted in industry definitions and will be demonstrated in the *Bridge Between NAICS 2002 and NAICS 1997*.

For 2002, data for enterprise support establishments (those functioning primarily to support the activities of their company's operating establishments, such as a warehouse or a research and development laboratory) are included in the industry that reflects their activities (such as warehousing). For 1997, such establishments were termed auxiliaries and were excluded from industry totals.

#### **BASIS OF REPORTING**

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company. (For selected industries, only payroll, employment, and classification are collected for individual establishments, while other data are collected on a consolidated basis.)

#### **GEOGRAPHIC AREA CODING**

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for states, metropolitan and micropolitan statistical areas, counties, and corporate municipalities (places) including cities, towns, townships, villages, and boroughs. Respondents were required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from administrative sources is used as a basis for coding.

#### **AVAILABILITY OF ADDITIONAL DATA**

All results of the 2002 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on digital versatile discs (DVD-ROMs) for sale by the Census Bureau. The American FactFinder system at the Internet site allows selective retrieval and downloading of the data. For more information, including a description of reports being issued, see the Internet site, write to the U.S. Census Bureau, Washington, DC 20233-6100, or call Customer Services at 301-763-4100.

#### HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart

from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some service trades in 1933. Censuses of construction, manufacturing, and the other business censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated, providing comparable census data across economic sectors and using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census report forms.

The range of industries covered in the economic census expanded between 1967 and 2002. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity. New for 2002 is coverage of four industries classified in the agriculture, forestry, and fishing sector under the SIC system: landscape architectural services, landscaping services, veterinary services, and pet care services.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. Reports for 1997 were published primarily on the Internet and copies of 1992 reports are also available there. CD-ROMs issued from the 1987, 1992, and 1997 Economic Censuses contain databases that include all or nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

#### **SOURCES FOR MORE INFORMATION**

More information about the scope, coverage, classification system, data items, and publications for the 2002 Economic Census and related surveys is published in the *Guide to the 2002 Economic Census* at www.census.gov/econ/census02/guide. More information on the methodology, procedures, and history of the census will be published in the *History of the 2002 Economic Census* at www.census.gov/econ/www/history.html.

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## Construction

#### **SCOPE**

The Construction sector (sector 23) comprises establishments primarily engaged in the construction of buildings or engineering projects (e.g., highways and utility systems). Establishments primarily engaged in the preparation of sites for new construction and establishments primarily engaged in subdividing land for sale, as building sites also are included in this sector.

Construction work done may include new work, additions, alterations, or maintenance and repairs. Activities of these establishments generally are managed at a fixed place of business, but they usually perform construction activities at multiple project sites. Production responsibilities for establishments in this sector are usually specified in (1) contracts with the owners of construction projects (prime contracts) or (2) contracts with other construction establishments (subcontracts).

Establishments primarily engaged in contracts that include responsibility for all aspects of individual construction projects are commonly known as general contractors, but also may be known as design-builders, construction managers, turnkey contractors, or (in cases where two or more establishments jointly secure a general contract) joint-venture contractors. Construction managers that provide oversight and scheduling only (i.e., agency) as well as construction managers that are responsible for the entire project (i.e., at risk) are included as general contractor type establishments. Establishments of the "general contractor type" frequently arrange construction of separate parts of their projects through subcontracts with other construction establishments.

Establishments primarily engaged in activities to produce a specific component (e.g., masonry, painting, and electrical work) of a construction project are commonly known as specialty trade contractors. Activities of specialty trade contractors are usually subcontracted from other construction establishments but, especially in remodeling and repair construction, the work may be done directly for the owner of the property.

Establishments primarily engaged in activities to construct buildings to be sold on sites that they own are known as operative builders, but also may be known as speculative builders or merchant builders. Operative builders produce buildings in a manner similar to general contractors, but their production processes also include site acquisition and securing of financial backing. Operative builders are most often associated with the construction of residential buildings. Like general contractors, they may subcontract all or part of the actual construction work on their buildings.

There are substantial differences in the types of equipment, work force skills, and other inputs required by establishments in this sector. To highlight these differences and variations in the underlying production functions, this sector is divided into three subsectors.

Subsector 236, Construction of Buildings, comprises establishments of the general contractor type and operative builders involved in the construction of buildings. Subsector 237, Heavy and Civil Engineering Construction, comprises establishments involved in the construction of engineering projects. Subsector 238, Specialty Trade Contractors, comprises establishments engaged in specialty trade activities generally needed in the construction of all types of buildings.

**Exclusions.** Force account construction is construction work performed by an enterprise primarily engaged in some business other than construction for its own account and use, using employees of the enterprise. This activity is not included in the construction sector unless the construction work performed is the primary activity of a separate establishment of the enterprise.

The installation and the ongoing repair and maintenance of telecommunications and utility networks is excluded from construction when the establishments performing the work are not independent contractors. Although a growing proportion of this work is subcontracted to independent contractors in the Construction Sector, the operating units of telecommunications and utility companies performing this work are included with the telecommunications or utility activities.

The tabulations for this sector do not include central administrative offices, warehouses, or other establishments that serve construction establishments within the same organization. Data for such establishments are classified according to the nature of the service they provide. For example, separate headquarters establishments are reported in NAICS Sector 55, Management of Companies and Enterprises.

The reports described below exclude establishments of firms with no paid employees. These "nonemployers," typically self-employed individuals or partnerships operating businesses that they have not chosen to incorporate, are reported separately in *Nonemployer Statistics*. The contribution of nonemployers, relatively large for this sector, may be examined at www.census.gov/nonemployerimpact.

**Definitions.** Industry categories are defined in Appendix B, NAICS Codes, Titles, and Descriptions. Other terms are defined in Appendix A, Explanation of Terms.

#### REPORTS

The following reports provide statistics on this sector.

**Industry Series.** There are 31 reports, each covering a single NAICS industry (six-digit code). These reports include such statistics as number of establishments, employment, payroll, value added by construction, cost of materials, value of construction work, value of business done, capital expenditures, etc. The industry reports also include selected statistics for states. While most of the state data in the industry series reports are by physical location of the establishment, some data are available by reported location of the construction work. The data in industry reports are preliminary and subject to change in the following reports.

**Geographic Area Series.** There are 51 separate reports, one for each state and the District of Columbia. Each state report present similar statistics at the "all construction" level for each state.

#### **Subject Series:**

- **Industry General Summary.** This report contains industry statistics summarized in one report. It includes higher levels of aggregation than the industry reports, as well as revisions to the data made after the release of the industry reports.
- Industry Kind Of Business and Type of Construction Summary. This report contains industry kind of business and types of construction statistics summarized in one report. It includes higher levels of aggregation than the industry reports, as well as revisions to the data made after the release of the industry reports.
- **Geographic Area Summary.** This report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

**Other reports.** Data for this sector are also included in reports with multisector coverage, including *Nonemployer Statistics, Comparative Statistics, Bridge Between 2002 NAICS and 1997 NAICS, Business Expenses,* and the Survey of Business Owners reports.

#### **GEOGRAPHIC AREAS COVERED**

- 1. The United States as a whole.
- 2. States and the District of Columbia.

- 3. Census regions. The regions are made up of groups of states as follows:
  - a. Northeast region: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont
  - b. Midwest region: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
  - c. South region: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
  - d. West region: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

#### **DOLLAR VALUES**

All dollar values presented are expressed in current dollars; i.e., 2002 data are expressed in 2002 dollars, and 1997 data, in 1997 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

#### COMPARABILITY OF THE 1997 AND 2002 ECONOMIC CENSUSES

Both the 2002 Economic Census and the 1997 Economic Census present data based on the North American Industry Classification System (NAICS). There were substantial revisions made to the entire construction sector, for 2002. These changes are:

- 1. Each subsector has been reclassified in 2002 to:
  - 236—Construction of Buildings
  - 237—Heavy and Civil Engineering Construction
  - 238—Specialty Trade Contractors
- 2. Adopted several mining industries:
  - oil and gas pipeline and related structures construction, now in Industry 237120
  - site preparation and related construction activities on a contract or fee basis, now in Industry 238910.

More detailed information of NAICS changes from 1997 to 2002, may be examined at http://www.census.gov/epcd/naics02/n02ton97.htm.

In addition, there have been several additional data tables added, which did not exist in 1997. These tables for 2002 include e-commerce value of business done and leased and nonleased detail employment statistics by subsectors. Also included is housing starts by single NAICS industry (six-digit code).

#### **RELIABILITY OF DATA**

All data compiled for this sector are subject to nonsampling errors. Nonsampling errors can be attributed to many sources: inability to identify all cases in the actual universe; definition and classification difficulties; differences in the interpretation of questions; errors in recording or coding the data obtained; and other errors of collection, response, coverage, processing, and estimation for missing or misreported data.

No direct measurement of these effects has been obtained except for estimation for missing or misreported data, as by the percentages shown in the tables. Precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize the effects of nonsampling errors. More information on the reliability of the data is included in Appendix C, Methodology.

#### **DISCLOSURE**

In accordance with federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at www.census.gov/epcd/ec02/disclosure.htm.

#### AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The U.S. Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place contain data related to construction sector census data. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity. The construction sector census data covers both new construction and maintenance and repair work done by establishments classified in the construction industries. Significant amounts of construction are done by establishments classified outside of construction (real estate, manufacturing, utilities, and communications, for example), as both "force account" construction and construction done for others. In addition, the C30 series includes constructionrelated expenses such as architectural and engineering costs and the costs of materials supplied by owners that are normally not reflected in construction sector census data.

Data contained in the 2002 construction sector may also differ from industry data in Employment and Earnings Statistics, published by the Bureau of Labor Statistics and Statistics of Income, published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

In addition, the County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county, and Statistics of U.S. Businesses provides annual statistics classified by the employment size of the enterprise, further classified by industry for the United States, and by broader categories for states and metropolitan areas.

#### **CONTACTS FOR DATA USERS**

Questions about these data may be directed to the U.S. Census Bureau, Manufacturing & Construction Division, Information Services Center, 301-763-4673 or ask.census.gov.

#### ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with these data:

- Standard error of 100 percent or more
- Withheld to avoid disclosing data of individual companies; data are included in higher level totals D
- F Exceeds 100 percent because data include establishments with payroll exceeding revenue
- Ν Not available or not comparable
- S Withheld because estimates did not meet publication standards
- Χ Not applicable
- Z Less than half the unit shown
- a 0 to 19 employees
- b 20 to 99 employees
- C 100 to 249 employees
- 250 to 499 employees e
- f 500 to 999 employees
- 1.000 to 2.499 employees g
- h 2,500 to 4,999 employees
- 5,000 to 9,999 employees i 10,000 to 24,999 employees
- ĸ 25,000 to 49,999 employees

50,000 to 99,999 employees

100,000 employees or more m

U.S. Census Bureau, 2002 Economic Census

10 to 19 percent estimated 20 to 29 percent estimated р q r

Revised

S

nsk

Sampling error exceeds 40 percent Not specified by kind Represents zero (page image/print only) Consolidated city Independent city

(CC) (IC)

2002 Economic Census Construction xiii

## Table 1. Industry Statistics on 2002 NAICS Basis Distributed Among 1997 NAICS-Based Industries for the United States: 2002

[Thousand dollars unless otherwise noted. Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A. For detailed title descriptions, see Appendix F]

2002 NAICS code	1997 bridge code	Industry or bridge	Number of estab- lishments	Total number of employees	Total payroll	Value of construction work <sup>1</sup>	Net value of construction work	Value added	Cost of materials, components, supplies, and fuels	Capital expenditures, other than land
			Α	В	С	D	Е	F	G	Н
236117		New housing operative builders	15 191	186 814	8 570 366	118 968 305	74 871 972	44 778 087	31 026 427	719 552
	23321000	Single family housing construction (pt)	14 742	174 606	8 278 554	116 309 143	73 107 248	43 305 634	30 633 293	D
	23322000	Multifamily housing construction (pt)	449	12 208	291 812	2 659 161	1 764 724	1 472 452	393 133	D

<sup>1</sup> For the 2002 Economic Census, the definition of value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definition.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

### Table 2. Employment Statistics for Establishments by State: 2002

[Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, nonsampling error, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

		Number of	employees	ı	Number of cons	truction worker	Pa (thousan	Relative standard		
Location of establishment	Number of estab- lishments	Total	Con- struction workers	January to March	April to June	July to September	October to December	Total	Con- struction workers	error of estimate (percent) for column—
	А	В	С	D	E	F	G	н	1	В
236117, New housing operative builders										
United States. Alabama Alaska Arizona Arkansas California	15 191	186 814	87 820	80 840	90 204	90 908	89 328	8 570 366	3 167 286	1
	323	1 860	878	872	939	868	832	66 184	30 749	10
	46	320	D	D	208	237	216	11 417	D	9
	256	6 578	2 890	2 766	2 928	3 014	2 854	295 411	92 578	4
	165	493	260	306	273	249	214	11 216	4 909	23
	819	27 959	13 673	7 949	15 240	15 616	15 886	1 191 277	400 661	2
Colorado Connecticut Delaware District of Columbia Florida	443	6 478	2 800	2 809	2 866	2 793	2 731	339 138	104 860	3
	143	827	472	449	492	485	464	45 730	21 068	11
	49	606	320	297	312	333	340	29 868	D	7
	2	D	D	D	D	D	D	D	D	S
	636	19 327	7 194	7 292	7 277	7 192	7 014	905 659	307 790	2
Georgia	986	7 205	3 764	3 703	3 902	3 700	3 751	316 535	134 351	10
Hawaii	30	518	254	233	242	259	283	24 048	7 759	12
Idaho	156	1 730	1 432	1 408	1 441	1 443	1 437	16 688	8 259	63
Illinois	665	8 585	4 550	4 286	4 645	4 693	4 577	432 474	166 700	6
Indiana	287	3 288	D	D	1 409	1 400	1 559	141 974	D	5
lowa	137	994	572	528	588	618	554	35 397	D	12
Kansas	133	1 092	D	D	590	656	663	37 431	D	12
Kentucky	236	3 397	1 431	1 343	1 444	1 474	1 461	135 391	43 017	6
Louisiana	237	1 006	648	718	705	593	575	43 570	24 532	21
Maine	34	213	140	140	142	146	131	8 969	4 739	14
Maryland	311	4 607	2 454	2 412	2 365	2 545	2 493	235 132	D	6
Massachusetts	215	1 242	624	640	658	604	595	66 296	29 054	9
Michigan	679	3 601	D	1 757	1 864	D	1 663	158 124	D	6
Minnesota	408	4 167	D	2 169	2 250	2 231	D	180 189	73 414	10
Mississippi	82	740	426	411	414	435	445	19 255	9 084	23
Missouri Montana Nebraska Nevada New Hampshire	358 115 109 112 78	3 608 363 940 4 509 834	D 203 534 2 079 D	D 212 509 1 955 D	D 194 576 2 010 499	2 206 212 532 2 158 528	2 199 194 521 2 194 487	138 166 10 084 40 916 243 255 35 399	5 236 15 002 92 488 15 850	5 14 16 3 10
New Jersey New Mexico New York North Carolina North Dakota	382	3 917	1 637	1 673	D	1 645	D	212 418	72 458	11
	64	815	D	D	356	369	D	33 876	13 330	5
	406	3 219	1 687	1 627	1 769	1 705	1 646	138 980	57 912	9
	842	6 853	D	2 950	D	3 140	3 048	287 631	D	5
	35	221	135	138	121	143	140	7 352	3 459	21
Ohio Oklahoma Oregon Pennsylvania Rhode Island	527	5 944	2 713	2 653	2 738	2 788	2 674	271 826	98 004	5
	230	940	367	378	354	377	358	29 075	11 245	14
	410	1 977	1 003	874	1 103	1 017	1 019	70 277	26 585	11
	460	5 677	2 696	D	2 670	2 794	D	256 766	95 184	4
	52	184	103	113	109	95	94	7 594	3 596	15
South Carolina South Dakota Tennessee Texas Utah	382	2 445	1 150	1 197	1 085	1 154	1 161	93 475	32 495	8
	71	357	217	205	226	246	191	9 896	5 489	21
	372	2 876	1 871	2 013	1 839	1 827	1 805	166 829	107 876	20
	694	16 283	6 197	6 096	6 394	6 158	6 139	1 016 056	335 449	2
	244	1 605	762	769	D	779	D	55 300	21 529	10
Vermont Virginia Washington West Virginia Wisconsin Wyoming	19 673 684 140 242 12	115 9 450 4 576 647 1 493 D	64 3 676 2 439 415 796 D	67 3 637 2 363 453 754 D	75 3 624 2 438 419 799 D	66 3 810 2 537 396 898 D	47 3 633 2 419 392 734 D	5 845 434 702 175 600 14 566 62 471 D	146 816 74 684 7 685 D	8 4 7 15 10 S

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

## Table 3. General Statistics for Establishments by State: 2002

[Thousand dollars unless otherwise noted. Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, nonsampling error, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

Location of establishment	E¹	Value of construction work <sup>2</sup>	Net value of construction work	Value added	Cost of materials, components, supplies, and fuels	Cost of construction work subcontracted out to others	Total rental costs	Capital expend- itures, other than land	End-of-year gross book value of depreciable assets	error of (perce	standard estimate ent) for mn—
	А	В	С	D	Е	F	G	Н	I	С	Н
236117, New housing operative builders											
United States	- - - - -	118 968 305 918 594 152 305 5 715 895 158 341 18 170 716	74 871 972 574 859 111 101 3 086 439 112 471 10 720 711	44 778 087 141 294 52 206 2 405 698 59 712 8 365 796	31 026 427 443 001 62 767 719 352 54 599 2 468 931	44 096 333 343 736 41 204 2 629 456 45 870 7 450 005	425 816 3 060 681 20 248 1 714 66 677	719 552 5 278 1 812 24 754 1 480 85 942	4 451 063 62 330 10 266 115 123 8 662 513 913	1 11 10 2 19 2	3 13 40 4 43 12
Colorado	- - - -	5 233 510 438 404 380 235 D 11 631 433	3 076 726 276 081 260 181 D 7 804 093	1 924 915 140 080 162 460 D 5 005 950	1 169 656 137 916 101 494 D 2 852 073	2 156 784 162 323 120 053 D 3 827 341	17 578 1 897 1 413 D 42 021	77 766 2 076 2 656 D 75 297	206 974 19 769 13 967 D 568 205	2 12 10 S 5	21 8 4 S 3
Georgia Hawaii Idaho Illinois Indiana	- - - 1	5 538 509 501 323 432 871 5 612 100 1 929 673	3 565 472 190 962 240 943 3 295 138 1 198 413	1 474 737 D 87 463 1 993 110 568 820	2 118 902 24 592 161 986 1 330 026 636 915	1 973 037 310 361 191 928 2 316 962 731 260	11 595 2 091 627 17 310 7 022	27 131 2 256 1 728 26 356 10 481	144 045 D 8 550 211 519 68 537	7 1 13 5 4	16 26 37 9 10
lowa . Kansas Kentucky . Louisiana	- - - 1	365 668 676 757 1 617 722 325 607 71 654	221 293 399 183 979 675 208 931 51 771	94 138 133 410 443 261 95 927 D	134 315 271 545 582 749 116 909 29 005	144 375 277 575 638 047 116 676 19 883	1 617 1 606 4 214 939 207	3 618 4 432 11 120 1 271 1 135	32 072 28 091 94 398 12 635 5 775	9 9 7 17 12	11 14 23 18 13
Maryland . Massachusetts Michigan Minnesota Mississippi	- - - -	2 806 226 761 959 2 545 808 2 653 913 268 371	1 802 068 526 660 1 668 672 1 532 704 218 730	1 155 699 329 257 805 053 834 518 113 508	680 702 201 749 879 850 758 889 107 923	1 004 158 235 299 877 136 1 121 209 49 641	13 982 2 790 5 874 6 841 518	12 855 7 590 11 730 19 828 1 757	87 248 44 807 84 248 112 414 10 375	6 11 8 4 22	7 22 12 19 6
Missouri Montana Nebraska Nevada New Hampshire	- - - -	1 649 882 178 577 530 510 3 248 860 257 201	1 027 979 104 096 261 160 1 914 049 175 880	474 913 51 928 141 794 1 618 133 121 346	571 268 53 432 125 155 317 002 57 229	621 903 74 481 269 351 1 334 811 81 321	4 113 805 3 067 13 286 1 151	9 996 1 340 3 049 13 513 3 151	141 859 7 024 23 086 105 820 23 731	8 24 7 1 8	9 20 3 1 20
New Jersey New Mexico New York North Carolina North Dakota	- - - -	2 757 413 564 972 1 718 515 4 248 685 64 964	2 065 905 345 142 887 631 2 846 336 38 478	1 224 117 D 387 294 1 429 068 D	850 007 148 853 519 630 1 457 740 24 961	691 509 219 830 830 884 1 402 350 26 487	6 958 2 269 7 485 16 012 279	10 863 2 655 5 204 26 613 573	79 306 15 440 151 545 181 067 4 010	11 3 13 5 17	22 6 16 8 10
Ohio . Oklahoma . Oregon . Pennsylvania . Rhode Island .	- - - -	3 627 996 559 725 972 012 2 821 516 90 874	2 068 597 406 848 655 274 1 917 945 63 495	1 159 085 105 248 388 345 886 817 33 047	1 005 397 308 676 276 160 1 057 628 30 576	1 559 400 152 877 316 738 903 571 27 379	16 604 882 2 786 12 161 154	20 084 4 510 3 552 17 818 D	120 240 29 406 37 422 119 311 3 038	5 19 7 5 18	9 24 10 9 S
South Carolina . South Dakota . Tennessee . Texas . Utah .	- - - -	1 308 725 149 391 1 513 539 13 849 083 936 078	880 970 94 913 1 114 974 9 060 055 558 744	357 876 D 573 294 4 953 567 295 158	540 071 60 886 550 454 4 122 673 296 365	427 755 54 478 398 566 4 789 028 377 335	5 008 370 4 228 46 895 3 158	8 425 1 232 13 460 78 738 4 429	49 653 6 331 103 912 325 450 23 622	7 15 28 1 9	21 10 12 1 9
Vermont Virginia Washington West Virginia Wisconsin Wyoming.	- - - - -	65 780 5 413 732 2 733 425 123 276 642 328 D	31 874 3 787 895 1 929 252 95 726 395 332 D	D 2 251 016 1 225 468 54 832 195 886 D	19 311 1 592 637 725 504 47 444 213 948 D	33 906 1 625 837 804 173 27 550 246 996 D	324 33 174 9 512 310 2 144 D	288 27 457 17 865 1 678 21 721 335	7 659 177 382 118 978 26 644 87 915 3 497	5 3 6 15 14 S	8 5 11 19 61 3

¹Construction receipts were obtained from census respondent forms. For establishments whose respondent forms were not received at the time data were tabulated, these data were calculated using industry averages and imputation for nonresponse. The following symbols are shown where estimated imputation-based data on construction receipts account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent; 9–90 percent; 2For the 2002 Economic Census, the definition of value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definition.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

### Table 4. Detailed Statistics for Establishments: 2002

[Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

Item	Value	Relative standard error of estimate (percent)
236117, New housing operative builders		
All establishmentsnumber	15 191	3
All employeesnumber	186 814	1
Construction workers in March	80 840 90 204 90 908 89 328	2 2 2 2 2 2
Average number of construction workers	87 820	2
Other employees in March     number.       Other employees in May     number.       Other employees in August     number.       Other employees in November     number.       Average number of other employees     number.	94 814 97 224 102 266 101 674 98 994	
Total payroll         \$1,000.           Construction workers         \$1,000.           Other employees         \$1,000.	8 570 366 3 167 286 5 403 080	1 2 1
First-quarter payroll, all employees	1 978 445	1
Fringe benefits, all employees       \$1,000.         Legally required expenditures       \$1,000.         Voluntary expenditures       \$1,000.	1 335 564 904 207 431 357	1 1 1
Value of business done¹         \$1,000.           Value of construction work¹         \$1,000.           Value of construction work on government owned projects         \$1,000.           Value of construction work on federally owned projects         \$1,000.           Value of construction work on state and locally owned projects         \$1,000.           Value of construction work on privately owned projects         \$1,000.           Other business receipts         \$1,000.	119 900 846 118 968 305 6 260 068 2 735 170 3 524 898 112 708 237 932 541	1 1 2 2 2 2 1 1 5
Value of construction work subcontracted in from others	9 377 175	2
Net value of construction work	74 871 972	1
Value added\$1,000	44 778 087	1
Selected costs.         \$1,000.           Materials, parls, and supplies         \$1,000.           Construction work subcontracted out to others         \$1,000.           Selected power, fuels, and lubricants         \$1,000.           Purchased electricity         \$1,000.           Natural gas and manufactured gas         \$1,000.           Gasoline and diesel fuel         \$1,000.           On-highway use of gasoline and diesel fuel         \$1,000.           Off-highway use of gasoline and diesel fuel         \$1,000.           All other fuels and lubricants         \$1,000.	75 122 759 30 305 881 44 096 333 720 546 275 058 99 648 321 270 268 132 53 139 24 569	1 1 1 1 1 1 1 1 2 2 2
Total rental costs         \$1,000.           Machinery and equipment         \$1,000.           Buildings         \$1,000.	425 816 136 242 289 574	1 2 1
Selected purchased services         \$1,000.           Communication services         \$1,000.           Repairs to buildings and other structures         \$1,000.           Repairs to machinery and equipment         \$1,000.           Legal services         \$1,000.           Accounting, auditing, and bookkeeping services         \$1,000.           Advertising and promotional services         \$1,000.	2 595 582 837 620 315 472 270 376 182 025 130 621	3 1 11 2 5 5 13 8
Beginning-of-year gross book value of depreciable assets       \$1,000         Capital expenditures, other than land       \$1,000         Retirements and disposition of depreciable assets       \$1,000	4 008 683 719 552 277 172	2 3 2
End-of-year gross book value of depreciable assets	4 451 063	2
Depreciation charges during year\$1,000	463 112	2
Establishments with inventories	3 296 25 798 859 7 519 847 6 396 264	
Establishments with no inventories	11 733 92 779 047	Ξ
Establishments not reporting inventories	161 390 400	_ _

<sup>&</sup>lt;sup>1</sup>For the 2002 Economic Census, the definitions of value of business done and value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definitions.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

## Table 5. Selected Statistics for Establishments by Employment Size Class: 2002

[Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

Employment size class	E¹	Number of estab- lishments	Total number of employees	Total payroll	Value of business done <sup>2</sup>	Value of construction work <sup>2</sup>	Net value of construction work	Value added	Cost of materials, components, supplies, and fuels	Cost of construction work subcontracted out to others	Relative standard error of estimate (percent) for column—
	Α	В	С	D	E	F	G	н	I	J	С
236117, New housing operative builders											
All establishments	-	15 191	186 814	8 570 366	119 900 846	118 968 305	74 871 972	44 778 087	31 026 427	44 096 333	1
1 to 4 employees. 5 to 9 employees. 10 to 19 employees 20 to 49 employees 50 to 99 employees 100 to 249 employees 250 to 499 employees 500 to 999 employees 1,000 employees or more		9 020 3 199 1 411 861 381 240 59 14	19 150 20 579 18 698 25 987 26 539 36 493 20 176 10 105 9 088	643 569 755 474 744 039 1 266 048 1 421 406 1 973 322 1 056 560 499 287 210 662	10 959 356 10 128 446 10 368 972 16 688 010 18 330 900 31 335 138 14 352 386 4 995 982 2 741 656	10 843 399 9 972 907 10 261 523 16 516 085 18 220 700 31 211 796 14 259 780 4 973 992 2 708 123	6 884 720 6 345 540 6 653 455 10 381 362 11 953 641 19 635 444 8 277 279 3 043 738 1 696 793	2 670 447 3 138 077 3 513 310 6 291 080 7 510 497 12 899 433 5 669 280 2 078 557 1 007 416	4 330 230 3 363 001 3 247 594 4 262 206 4 553 345 6 859 353 2 700 605 987 181 722 910	3 958 679 3 627 367 3 608 067 6 134 723 6 267 059 11 576 352 5 982 501 1 930 254 1 011 330	4 5 4 3 4 1 -

<sup>&</sup>lt;sup>1</sup>Construction receipts were obtained from census respondent forms. For establishments whose respondent forms were not received at the time data were tabulated, these data were calculated using industry averages and imputation for nonresponse. The following symbols are shown where estimated imputation-based data on construction receipts account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

<sup>2</sup> For the 2002 Economic Census, the definitions of value of business done and value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definitions.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

### Table 6. Selected Statistics for Establishments by Value of Business Done Size Class: 2002

[Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

Dollar value size class	E¹	Number of estab- lishments	Total number of employees	Total payroll	Value of business done <sup>2</sup>	Value of construction work <sup>2</sup>	Net value of construction work	Value added	Cost of materials, components, supplies, and fuels	Cost of construction work subcontracted out to others	Relative standard error of estimate (percent) for column—
	Α	В	С	D	E	F	G	Н	I	J	G
236117, New housing operative builders											
All establishments  Establishments with value of business done —	-	15 191	186 814	8 570 366	119 900 846	118 968 305	74 871 972	44 778 087	31 026 427	44 096 333	1
Less than \$25,000 \$25,000 to \$49,999 \$50,000 to \$49,999 \$100,000 to \$99,999 \$250,000 to \$499,999 \$500,000 to \$499,999 \$1,000,000 to \$4,999,999 \$2,500,000 to \$4,999,999 \$5,000,000 to \$4,999,999 \$10,000,000 to \$9,999,999 \$10,000,000 to \$9,999,999 \$10,000,000 to more	9	9 119 261 1 159 2 056 2 497 3 943 2 096 1 361 1 689	D 300 2 275 5 063 8 170 17 290 16 209 16 600 120 786	26 1 835 6 803 54 003 138 693 226 078 586 885 577 934 684 588 6 293 521	62 4 483 19 710 203 730 742 734 1 841 137 6 325 319 7 484 811 9 234 719 94 044 140	62 4 483 19 667 198 562 735 441 1 805 220 6 230 855 7 401 544 9 081 941 93 490 530	40 3 691 13 424 151 942 523 083 1 232 791 4 089 836 4 657 960 5 692 974 58 506 230	25 2 733 9 152 86 003 267 525 506 986 1 705 011 2 127 186 2 568 938 37 504 529	15 959 4 316 71 107 262 851 761 724 2 479 290 2 614 041 3 276 814 21 555 311	22 792 6 243 46 620 212 358 572 428 2 141 019 2 743 583 3 388 967 34 984 300	- 39 28 12 9 8 6 7 6

<sup>&</sup>lt;sup>1</sup>Construction receipts were obtained from census respondent forms. For establishments whose respondent forms were not received at the time data were tabulated, these data were calculated using industry averages and imputation for nonresponse. The following symbols are shown where estimated imputation-based data on construction receipts account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

2For the 2002 Economic Census, the definitions of value of business done and value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definitions.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

## Table 7. Value of Construction Work for Establishments by Type of Construction: 2002

[Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

		Value of cons	truction work1					
Type of construction	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair	Relative standard error of estimate (percent) for column —			
	Α	В	С	D	А	В	С	D
236117, New housing operative builders								
Total	118 968 305	118 252 616	550 657	165 032	1	1	6	6
Building construction, total Single-family houses, detached and attached Single-family houses, detached Single-family houses, attached Apartment buildings (2 or more units), such as rentals,	118 001 753 114 210 008 101 801 701 12 408 308	117 338 913 113 643 452 101 299 276 12 344 176	518 670 437 189 390 264 46 925	144 169 129 368 112 161 17 207	1 1 1 2	1 1 1 2	6 7 7 20	7 7 8 19
apartment buildings (2 or more units), such as remais, apartment type condominiums and cooperatives	3 295 546 496 198	3 259 204 436 257	27 992 53 489	8 350 6 452	6 4	6 4	16 13	37 14
Nonbuilding construction, total Other nonbuilding construction	D D	D D	31 986 31 986	20 863 20 863	S S	S S	5 5	4 4
Construction work, nsk	D	D	-	-	S	S	_	_

<sup>1</sup> For the 2002 Economic Census, the definition of value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definition.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

# Table 8. Selected Statistics for Establishments by Specialization in Types of Construction: 2002

[Thousand dollars unless otherise noted. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in Table 7. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at the end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

sampling error, and nonsampling error, see note at the err	a or table. I or me	drining of abbitoria	dono ana oymbolo	, occ introductory	toxt. Tor explanat	011 01 1011110, 000 7	ipportaix / ij	
ltem	Number of estab- lishments	Total number of employees	Total payroll	Value of construction work for specialized type	Net value of construction work	Value added	Cost of construction work subcontracted out to others	Relative standard error of estimate (percent) for column—
	А	В	С	D	Е	F	G	G
236117, New housing operative builders								
Total	15 191 15 035	186 814 183 335	8 570 366 8 417 768	X 109 109 626	74 871 972 73 714 710	44 778 087 43 881 037	44 096 333 43 639 333	1 1
Building construction, total								
Establishments specializing 51 percent or more	15 034	D	D	D	D	D	D	s
Specialization 100 percent Specialization 90 to 99 percent Specialization 80 to 89 percent Specialization 70 to 79 percent Specialization 60 to 69 percent Specialization 51 to 59 percent	12 624 677 575 422 350 386	D 18 933 11 759 10 630 7 947 8 088	D 932 494 603 493 537 957 370 742 386 182	D 13 183 897 6 197 552 5 685 467 3 532 098 2 405 209	9 179 180 5 110 422 4 577 443 3 581 217 2 995 993	5 701 386 3 314 492 3 008 917 2 447 743 1 839 617	D 4 912 098 2 281 344 3 138 944 2 002 396 1 469 604	S 1 2 4 5 1
Single-family houses, detached and attached								
Establishments specializing 51 percent or more	14 584	171 119	8 125 460	106 670 768	71 948 427	42 407 639	42 744 181	1
Specialization 100 percent Specialization 90 to 99 percent Specialization 80 to 89 percent Specialization 70 to 79 percent Specialization 60 to 69 percent Specialization 60 to 69 percent Specialization 51 to 59 percent	12 288 662 555 416 318 346	116 287 18 567 11 588 10 371 7 687 6 621	5 399 590 917 760 596 166 525 844 361 483 324 617	76 129 890 13 048 813 6 149 228 5 627 561 3 460 717 2 254 560	47 010 818 9 055 848 5 064 439 4 505 932 3 524 673 2 786 716	26 465 485 5 601 444 3 286 757 2 946 958 2 410 501 1 696 493	29 119 072 4 891 174 2 266 923 3 131 024 1 944 841 1 391 147	1 1 2 4 5
Single-family houses, detached								
Establishments specializing 51 percent or more	13 153	158 242	7 562 863	99 943 636	67 044 502	39 638 707	39 674 532	1
Specialization 100 percent Specialization 90 to 99 percent Specialization 80 to 89 percent Specialization 70 to 79 percent Specialization 70 to 79 percent Specialization 60 to 69 percent Specialization 51 to 59 percent	11 365 581 452 291 200 264	110 214 17 112 10 506 9 153 6 201 5 056	5 138 253 857 776 550 556 479 787 295 376 241 114	72 530 202 12 219 831 5 573 221 5 146 953 2 877 259 1 596 170	44 725 543 8 471 456 4 570 319 4 163 356 3 021 434 2 092 393	25 236 254 5 271 312 3 046 911 2 808 043 2 021 496 1 254 692	27 804 659 4 585 730 2 057 745 2 818 901 1 519 970 887 527	1 1 2 2 6 2
Single-family houses, attached								
Establishments specializing 51 percent or more	1 432	12 877	562 597	6 727 133	4 903 925	2 768 932	3 069 650	6
Specialization 100 percent Specialization 90 to 99 percent Specialization 80 to 89 percent Specialization 70 to 79 percent Specialization 60 to 69 percent Specialization 51 to 59 percent	923 81 103 125 118 82	6 073 1 455 1 082 1 218 1 485 1 564	261 337 59 984 45 610 46 057 66 107 83 502	3 599 688 828 981 576 007 480 608 583 458 658 390	2 285 275 584 393 494 120 342 576 503 239 694 323	1 229 231 330 132 239 847 138 915 389 005 441 802	1 314 413 305 444 209 178 312 123 424 871 503 620	11 6 13 34 4 1
Apartment buildings (2 or more units), such as rentals, apartment type condominiums and cooperatives								
Establishments specializing 51 percent or more	449	D	D	D	D	D	D	s
Specialization 100 percent Specialization 90 to 99 percent Specialization 80 to 89 percent Specialization 80 to 79 percent Specialization 70 to 79 percent Specialization 60 to 69 percent Specialization 51 to 59 percent	336 15 19 7 32 39	D 366 171 259 260 1 468	D 14 734 7 327 12 113 9 259 61 565	D 135 085 48 324 57 906 71 381 150 650	D 123 331 45 983 71 511 56 544 209 276	D 99 941 27 735 61 959 37 242 143 124	D 20 924 14 422 7 920 57 554 78 457	S 17 30 72 23 12
Construction work, nsk								
Establishments specializing 51 percent or more	1	D	D	D	D	D	D	s
Specialization 100 percent Specialization 90 to 99 percent Specialization 80 to 89 percent Specialization 70 to 79 percent Specialization 60 to 69 percent Specialization 60 to 59 percent	1 - - - -	D - - - -	D - - - -	D - - - -	D - - - -	D - - - -	D - - - -	S - - - -

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

## Table 9. Value of Business Done for Establishments by Kind-of-Business Activity: 2002

[Thousand dollars unless otherwise noted. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols,see introductory text. For explanation of terms, see Appendix A]

Primary and other kind of business activities	Value of business done <sup>1</sup>	Relative standard error of estimate (percent	
236117, New housing operative builders			
Total	119 900 846	1	
Building construction, total Building construction on land owned by you, for sale	113 325 719 113 325 719	1 1	
All other construction activities	5 668 667	4	
Other business activities secondary to construction activities, total  All other business activities secondary to construction activities	906 460 906 460	5 5	

<sup>1</sup> For the 2002 Economic Census, the definition of value of business done has been modified from the 1997 Economic Census definition. See Appendix A for the modified definition.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

# Selected Statistics for Establishments by Specialization in Kind-of-Business Activity:

[Thousand dollars unless otherwise noted. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization by major activity of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of business done by kind of business activity was not provided in Table 9. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

ltem	Number of estab- lishments	Total number of employees	Total payroll	Value of construction work for specialized kind of business	Net value of construction work	Value added	Cost of construction work subcontracted out to others	Relative standard error of estimate (percent) for column—
	Α	В	С	D	E	F	G	G
236117, New housing operative builders								
Total Establishments specializing 51 percent or more	15 191 15 187	186 814 186 814	8 570 366 8 570 366	X 112 639 464	74 871 972 74 871 972	44 778 087 44 778 087	44 096 333 44 096 333	1 1
Building construction, total								
Establishments specializing 51 percent or more	15 187	186 814	8 570 366	112 639 464	74 871 972	44 778 087	44 096 333	1
Specialization 100 percent Specialization 90 to 99 percent Specialization 80 to 89 percent Specialization 70 to 79 percent Specialization 60 to 69 percent Specialization 51 to 59 percent	7 167 2 133 1 341 1 179 1 035 2 332	116 858 26 630 10 858 8 778 8 653 15 037	5 732 874 1 276 625 436 387 327 309 329 749 467 423	82 218 425 17 887 746 4 554 413 3 488 736 2 280 441 2 209 703	51 585 468 12 107 742 3 098 465 2 910 084 2 388 334 2 781 879	31 578 336 6 555 451 1 848 716 1 721 320 1 450 369 1 623 895	30 632 958 6 640 845 2 351 887 1 796 727 1 203 144 1 470 773	1 2 3 5 9 9
Building construction on land owned by you, for sale								
Establishments specializing 51 percent or more	15 187	186 814	8 570 366	112 639 464	74 871 972	44 778 087	44 096 333	1
Specialization 100 percent Specialization 90 to 99 percent Specialization 80 to 89 percent Specialization 70 to 79 percent Specialization 60 to 69 percent Specialization 51 to 59 percent	7 167 2 133 1 341 1 179 1 035 2 332	116 858 26 630 10 858 8 778 8 653 15 037	5 732 874 1 276 625 436 387 327 309 329 749 467 423	82 218 425 17 887 746 4 554 413 3 488 736 2 280 441 2 209 703	51 585 468 12 107 742 3 098 465 2 910 084 2 388 334 2 781 879	31 578 336 6 555 451 1 848 716 1 721 320 1 450 369 1 623 895	30 632 958 6 640 845 2 351 887 1 796 727 1 203 144 1 470 773	1 2 3 5 9 9

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

# Value of Construction Work for Establishments by Location of Construction Work:

[Thousand dollars unless otherwise noted. Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, nonsampling error, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

Location of construction work	Value of construction work <sup>1</sup>	Relative standard error of estimate (percent) for column—
236117, New housing operative builders		
United States. Construction work done in— Alabama Alaska Arizona Arkansas California	118 968 305 805 951 152 305 6 009 971 158 326 17 594 838	1 12 11 2 20 2
Colorado Connecticut Delaware District of Columbia Florida	5 497 394 480 148 407 015 13 030 11 954 354	2 10 9 63 4
Georgia Hawaii Idaho Illinois Indiana	5 797 918 501 323 603 328 5 252 105 2 021 407	7 5 23 4 4
lowa Kansas Kentucky Louisiana Maine	380 421 679 024 874 650 308 257 72 803	9 8 9 17 11
Maryland Massachusetts Michigan. Minnesota Mississippi	2 829 737 738 977 2 573 580 2 581 819 283 956	5 12 8 7 18
Missouri . Montana . Nebraska . Nevada . New Hampshire .	1 634 340 179 943 549 175 3 568 040 222 053	10 21 8 1 6
New Jersey New Mexico New York North Carolina North Dakota	3 038 842 643 332 1 728 765 4 517 361 90 461	10 3 12 4 28
Ohio Oklahoma Oregon Pennsylvania Rhode Island	3 839 316 568 342 969 240 2 521 972 111 198	4 17 8 6 13
South Carolina South Dakota Tennessee Texas Utah	1 577 123 137 797 1 616 399 12 494 672 1 056 163	6 16 19 1 8
Vermont Virginia Washington West Virginia Wisconsin Wyoming	65 780 5 480 634 2 789 288 210 533 749 874 35 027	3 4 6 8 11 18

<sup>1</sup> For the 2002 Economic Census, the definition of value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definition.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

# Appendix A. Explanation of Terms

#### **ESTABLISHMENT**

A relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. Generally, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis.

Number of establishments includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

#### **NUMBER OF EMPLOYEES**

Includes all full-time and part-time individuals on the payrolls of construction establishments during any part of the pay period which included the 12th of March, May, August, and November. Included are individuals on paid sick leave, paid holidays, paid vacations, and salaried officers and executives of a corporation. Excluded are subcontractors and their employees; full- or part-time leased employees whose payroll was filed under an employee leasing company's Employer Identification Number; temporary staffing obtained from a staffing service; and proprietors and partners of unincorporated businesses.

Includes all permanent full-time and part-time employees who are on the payrolls of establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November.

The all employees or total number of employees number is the sum of construction workers plus other employees who were on the payroll during the pay periods including the 12th of March, May, August, and November, divided by four.

#### **Construction workers**

Includes all payroll workers (up through the working supervisory level) directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, on-site record keepers, and security guards. Supervisory employees above the working foreman level are excluded from this category and are included in the other employees category.

The average number of construction workers is the sum of construction workers who were on the payroll during the pay periods including the 12th of March, May, August, and November, divided by four.

### Other employees

Includes payroll employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working foreman level.

The average number of other employees is the sum of other employees who were on the payroll during the pay periods including the 12th of March, May, August, and November, divided by four.

#### **PAYROLL**

Includes the gross earnings paid in the reporting year to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, and vacation and sick leave pay, prior to deductions such as employees'

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Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

#### **Payroll for Construction Workers**

Includes the gross earnings paid in the reporting year to all construction workers on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, and vacation and sick leave pay, prior to deductions such as employees' Social security contributions, withholding taxes, group insurance, union dues, and savings bonds.

#### **Payroll for Other Employees**

Includes the gross earnings paid in the reporting year to all other employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, and vacations and sick leave pay, prior to deductions such as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. Payroll of other employees excludes salaries of the proprietor or partners, if unincorporated.

#### FIRST-QUARTER PAYROLL FOR ALL EMPLOYEES

Includes the gross earnings paid in the first quarter of the reporting year to all employees on the payroll of construction establishments. The first-quarter payroll period is the first quarterly pay period which includes March 12. Included are all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, and vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. It also includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

#### FRINGE BENEFITS FOR ALL EMPLOYEES

Includes the total sum of fringe benefits of all full-time and part-time employees on the payrolls of construction establishments during any part of the pay period which included the 12th of the months specified on the report form. Includes expenditures made by the employer for legally required and voluntary fringe benefit programs for employees.

#### **Legally Required Expenditures**

Includes expenditures made by the employer for Social Security and Medicare contributions, unemployment compensation, worker's compensation, and state temporary disability payments.

#### **Voluntary Expenditures**

Includes expenditures made by the employer for life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

#### **VALUE OF BUSINESS DONE**

Includes the sum of value of construction work and other business receipts. Value of business done is the sum of receipts, billings, or sales from establishments of construction business activities plus receipts from other business activities.

#### **Value of Construction Work**

In the 1987-1997 censuses, the value of construction work was collected to measure actual construction activity done during the year. Studies have shown that respondents were not able to accurately report these data. In 2002, receipts, billings, or sales for construction work was collected.

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This item includes the receipts, billings, or sales for construction work done by building contractors, heavy and civil engineering construction contractors, and specialty trade contractors. Included are new construction, additions, alterations or reconstruction, and maintenance and repair construction work. Establishments engaged in the sale and installation of construction components such as plumbing, heating, and central air-conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators, or escalators were instructed to include both the value for the installation and receipts covering the price of the items installed. Excluded are the cost of industrial and other special machinery and equipment that are not an integral part of a structure and receipts from business operations in foreign countries.

The value of construction work consists of several components that are summed up individually to get the total value of construction work. These components are:

- 1. Value of construction work on government owned projects. This is the total of all projects owned by federal, state, and local governments:
  - a. Value of construction work on federally owned projects. This is the value of construction work for projects owned by the federal government.
  - b. Value of construction work on state and locally owned projects. This is the summed total value of construction work for all projects owned by state and local governments.
- 2. Value of construction work on privately owned projects. This is the value of construction work for projects owned privately (excluding government owned projects).

#### **Other Business Receipts**

Includes the receipts for all other business activities done by an establishment in the current year. Includes business receipts not reported as value of construction work. This includes business receipts from retail and wholesale trade, rental of equipment without operator, manufacturing, transportation, legal services, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here. Excluded are nonoperating income such as interest, dividends, the sale of fixed assets, or receipts from other business operations in foreign countries.

#### **NET VALUE OF CONSTRUCTION WORK**

Includes the value of construction work less the cost of construction work subcontracted out to others.

#### VALUE ADDED

This measure of construction activity is equal to value of business done, less costs for construction work subcontracted out to others and costs for materials, components, supplies, and fuels.

#### VALUE OF CONSTRUCTION WORK SUBCONTRACTED IN FROM OTHERS

Includes the value of construction work done by reporting establishments as subcontractors to other contractors or builders. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a dollar value.

#### **CONSTRUCTION RECEIPTS PERCENT ESTIMATED**

Construction receipts were obtained from census respondent forms. For establishments whose respondent forms were not received at the time data were tabulated, the data were calculated using industry averages and imputation for nonresponse.

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#### SELECTED COSTS

Includes the direct charges actually paid or payable for costs incurred for purchases of materials, components, and supplies; costs of construction work subcontracted out to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are not included.

#### Cost of Materials, Components, and Supplies

Includes the costs for materials, components, and supplies used by establishments in the construction or reconstruction of buildings, structures, or other facilities plus costs for materials bought and resold to others. Also included are costs made for direct purchases of materials, components, and supplies although the purchases were subsequently provided to subcontractors for their use. Supplies include expendable tools which are charged to current accounts. Freight and other direct charges representing only that amount paid after discounts and the value of materials, components, and supplies obtained from other establishments of the respondent's company are also included. Excluded from this item are the cost of fuels, lubricants, electric energy, and industrial and other specialized machinery and equipment such as printing presses; computer systems that are not an integral part of a structure; and materials furnished to contractors by the owners of projects.

#### Cost of Construction Work Subcontracted Out to Others

Includes all costs for construction work subcontracted out to other construction contractors during the reporting year. Excluded from this item are costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. These costs are reported under costs for materials, components, and supplies. Also excluded are costs for the rental of machinery or equipment.

#### Cost of Selected Power, Fuels, and Lubricants

Includes costs for fuels including gasoline, diesel fuel and lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company. Also included are costs for natural gas, manufactured gas, fuel oil, and coal and coke products.

The components of selected power, fuels, and lubricants are:

- 1. Purchased electricity. This is the cost of electric energy purchased during the year from other companies or received from other establishments of the company.
- Natural gas and manufactured gas. This is the cost of natural gas and manufactured gas purchased during the year from other companies or received from other establishments of the company.
- 3. Gasoline and diesel fuel. This is the cost of gasoline and diesel fuel purchased during the year from other companies or received from other establishments of the company. This cost in broken down into two different uses of gasoline and diesel fuel. They are:
  - a. On-highway use of gasoline and diesel fuel. This is the cost of gasoline and diesel fuel purchased during the year to fuel highway vehicles. A highway vehicle is any self-propelled vehicle designed to carry a load over public highways, whether or not the vehicle was also designed to perform other functions. Examples of vehicles designed to carry a load over public highways are passenger automobiles, trucks, and truck tractors. If a vehicle can be used for a combination of on-highway and off-highway uses and has one fuel tank, the fuel use is not considered off-highway. An example of this is a concrete-mixer truck where the truck engine operates both the engine and the mixing unit by a power take-off and is fueled by a single tank. None of the fuel used in this vehicle is off-highway because of the on-highway use. If the vehicle has separate fuel tanks and engines, the fuel in a tank used for non-highway use may be considered off-highway use.

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- b. Off-highway use of gasoline and diesel fuel. This is the cost of gasoline and diesel fuel purchased during the reporting year for off-highway use. Off-highway fuel use is the use of fuel for trade, business, or income producing activity. In most cases, off-highway fuel use does not include use in a highway vehicle registered or required to be registered for use on public highways.
- 4. All other fuels and lubricants. This is the cost of fuels and lubricants purchased during the year from other companies or received from other establishments of the company that are not included as costs in any of these categories: natural gas; manufactured gas; gasoline; and diesel fuel.

#### COSTS OF MATERIALS, COMPONENTS, SUPPLIES, AND FUELS

Includes the costs for materials, components, and supplies used by establishments in the construction or reconstruction of buildings, structures, or other facilities plus costs for materials bought and resold to others. Also included is the costs for fuels. These include gasoline, diesel fuel, lubricants, electric energy purchased during the year from other companies or received from other establishments of the company, and costs for natural and manufactured gas, fuel oil, and coal and coke products. Excluded from this item are industrial and other specialized machinery and equipment, such as printing presses; computer systems that are not an integral part of a structure; and materials furnished to contractors by the owners of projects.

#### **RENTAL PAYMENTS**

Includes the total rental costs for renting and/or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes costs for the rental of land. It also excludes costs under agreements that in effect are conditional sales contracts such as capital leases. Such costs are included in capital expenditures.

#### SELECTED PURCHASED SERVICES

Includes the costs for services purchased from other companies that are paid directly by an establishment that are normally considered as overhead or non-job-related costs. Included are only the cost of repairs necessary to maintain property and equipment. Excluded are the cost of improvements that increase the value of property or the cost of adapting the property for another use. Such costs are included in capital expenditures. Also excluded are the salaries paid to employees and cost of construction activities subcontracted to others already reported within the selected costs of an establishment.

Included in the cost of selected purchased services for communication services is the actual expense incurred or payable during the year for any type of communication. Such types of communication include telephone, data transmission, telegraph, Internet, connectivity, FAX, telex, photo transmission, paging, cellular telephone, on-line access and related services, etc.

Included in the cost of selected purchased services for repairs to buildings and other structures is the actual expense incurred or payable during the year for any type of repair to buildings and other structures. Such types of repair include maintenance and repair of buildings, job-site trailers, and other structures. Excluded are janitorial services.

The cost of selected purchased services for repairs to machinery and equipment is the actual expense incurred or payable during the year for any type of repairs made to structures and equipment by outside companies or from other establishments of the same company. Such types of repairs to machinery and equipment include maintenance and repair of construction equipment and tools; machinery; and office equipment, furniture, and vehicles, including related service contracts.

Included in the cost of selected purchased services for legal services is the actual expense incurred or payable during the year for any type of legal services. Excluded are the salaries paid to employees of the establishment for these services.

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Included in the cost of selected purchased services for accounting, auditing, and bookkeeping services is the actual expense incurred or payable during the year for these services. Excluded are the salaries paid to employees of the establishment for these services.

Included in the cost of selected purchased services for advertising and promotional services is the actual expense incurred or payable during the year for these services. Such types of advertising and promotional services include advertising, marketing, promotional, or public relations services.

## GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Includes the value of depreciable assets for the beginning of year (BOY) and end of year (EOY). Gross value of depreciable assets are usually the original costs of the assets at the beginning of the year. The gross value of depreciable assets (BOY), plus any capital expenditures for new and used depreciable assets in the reporting year, minus the gross value of depreciable assets sold, retired, scrapped, destroyed, etc. in the reporting year, comprise gross book value of depreciable assets (EOY). Depreciable assets are the fixed tangible property of the establishment for which depreciation accounts are ordinarily maintained.

#### CAPITAL EXPENDITURES, OTHER THAN LAND

Includes capital expenditures that will be charged to the fixed assets accounts and for which depreciation accounts are ordinarily maintained. Includes the cost of capital improvements that were made during the year that increased the value of property or adapted the property for another use. Capital expenditures for leasehold improvements made to property leased from others are also included. Land expenditures are not included as capital expenditures. If any building or equipment had been acquired under a capital leasing arrangement that meet the criteria set down by the Financial Accounting Standards Board (FASB), respondents were instructed to report the original cost or market value as a fixed asset and as a capital expenditure, if acquired in the reporting year. If the lease qualified as an operating lease, respondents were instructed not to include the value of the building and equipment as a fixed asset or capital expenditure. If capital expenditures were not recorded directly at the establishment level but handled centrally at a company or division level, respondents were requested to report appropriate estimates for the individual establishments.

#### RETIREMENTS AND DISPOSITION OF DEPRECIABLE ASSETS

Includes the gross value of depreciable assets sold, retired, scrapped, destroyed, abandoned, etc., during the year. The values shown are the acquisition costs of the retired assets. This item also includes the value of assets (at acquisition cost rather than current market value) transferred to other establishments of the same company.

#### **DEPRECIATION CHARGES DURING YEAR**

Includes the depreciation expenses of the establishment during the reporting year. These expenses are charged against depreciable assets which are the fixed tangible property of the establishment for which depreciation accounts are ordinarily maintained.

#### **NUMBER OF ESTABLISHMENTS WITH INVENTORIES**

Includes all establishments with payroll that reported a dollar amount of inventory. Includes the number of establishments that were in business at any time during the reporting year. It covers all full-year and part-year operations. Construction establishments that were inactive or idle for the entire year were not included.

#### **Value of Construction Work for Establishments With Inventories**

Includes the value of construction work for establishments with payroll that reported a dollar amount of inventory in the reporting year.

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#### BEGINNING- AND END-OF-YEAR INVENTORIES OF MATERIALS AND SUPPLIES

Includes the inventories of materials and supplies owned at the beginning and end of the reporting year by establishments with payroll. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials that are owned by others but held by the reporting establishment. Builders who built on their own account for sale were requested to exclude work in progress and finished units not sold from inventories. Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories, even if these inventories were held at a separate location.

#### NUMBER OF ESTABLISHMENTS WITH NO INVENTORIES

Includes all establishments with payroll that reported having no inventories of materials and supplies during the reporting year. Includes the number of establishments that were in business at any time during the reporting year. It covers all full-year and part-year operations. Construction establishments that were inactive or idle for the entire reporting year were not included.

#### Value of Construction Work for Establishments With No Inventories

Includes the value of construction work for establishments with payroll that reported having no dollar amount of inventory in the reporting year.

#### NUMBER OF ESTABLISHMENTS NOT REPORTING INVENTORIES

Includes all establishments with payroll that did not report a dollar amount for inventories of materials and supplies during the reporting year. It covers all full-year and part-year operations. Construction establishments that were inactive or idle for the entire reporting year were not included.

#### Value of Construction Work for Establishments Not Reporting Inventories

Includes the value of construction work for establishments that did not report a dollar amount for inventories of materials and supplies, and the value of construction work for establishments that did not complete a census form.

#### VALUE OF CONSTRUCTION WORK BY TYPE OF CONSTRUCTION

Includes the dollar value of construction work according to the specified types of construction. There are three categories of construction. They are:

- 1. New construction. The original construction work done on a project including all finishing work on the original building or structure. Land development work on the site and demolition of existing structures are also included.
- 2. Additions, alterations, or reconstruction. The construction work which adds to the value or useful life of an existing building or structure or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
- 3. Maintenance and repair. The incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, cleaning, and janitorial services.

#### **Types of Construction**

Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in the reporting year. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents

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worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose; i.e., office and residential, or commercial, they were to classify the building by its major purpose. In addition, all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. There are two types of construction:

- 1. Building Construction. The details for this type of construction are defined as:
  - Single-family houses, detached. Includes all fully detached residential buildings constructed for one family use.
  - Single-family houses, attached, including townhouses and townhouse-type condominiums. Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
  - Apartment buildings, apartment-type condominiums, and cooperatives. Includes apartment rentals, high-rise, low-rise, or any structures containing two or more housing units, excluding attached single-family houses.
  - Dormitories and barracks. Includes school dormitories and military or nonmilitary barracks that are nonhousekeeping structures.
  - Other manufacturing and industrial buildings. Includes all manufacturing and industrial buildings and plants that are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial, or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
  - Manufacturing and industrial warehouses. Includes all warehouses which are intended for industrial activities.
  - Hotels and motels. Includes hotels, motels, bed-and-breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
  - Office buildings. Includes all buildings that are used primarily for office space or for government administrative offices. Also included are banks or financial buildings that are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.
  - All other miscellaneous commercial buildings. Includes all buildings that are intended for use primarily in the retail and service trades, i.e., shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
  - Commercial warehouses. Includes distribution buildings and mini-storage units intended for commercial use. Also included are storage warehouses.
  - Religious buildings. Includes all buildings that are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
  - Educational buildings. Includes all buildings that are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories that are not a part of a manufacturing or commercial establishment, are also included.

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- Health care and institutional buildings. Includes hospitals, medical office buildings, and all other buildings that are intended to provide health and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- Public safety buildings. Includes detention centers, prisons, fire stations, and rescue squad buildings.
- Farm buildings, nonresidential. Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- Amusement, social, and recreational buildings. Includes buildings that are used primarily
  for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, fitness centers, and bowling
  alleys.
- Indoor swimming pools. Includes pools that are inside a building.
- Indoor ice rinks. Includes ice rinks that are inside a building.
- Grain elevators and dry cleaning plants. Includes grain and storage elevators and dry cleaning plants.
- Waste disposal plants. Includes recycling centers, garbage disposal plants, incinerator disposed facilities, and material recovery facilities.
- Miscellaneous building construction. Includes all other nonresidential buildings such as fire stations, post offices, and bus and air passenger terminals and hangars.
- 2. Nonbuilding Construction. The details for this type of construction are defined as:
  - Highways, streets, and related work. Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, erosion control, installation of guard rails, highway signs, and lighting.
     Also includes earthwork protective structures when used in connection with road improvements.
  - Airport runways and related work. Includes airport runways, taxiways, aprons, and related work.
  - Private driveways and parking areas. Includes all nonstructural parking areas and private driveways of all surface types.
  - Bridges and elevated highways. Includes viaducts and overpasses, roads, highways, rail-roads, and causeways built on structural supports.
  - Tunnels. Includes highway, pedestrian, railroad, and water distribution tunnels.
  - Sewers, sewer lines, septic tanks, and related facilities. Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
  - Water mains and related facilities. Includes water supply systems, pumping stations, and related facilities.
  - Oil and gas pipeline construction. Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
  - Power and communication transmission lines, towers, and related facilities. Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
  - Power plants and cogeneration plants, except hydroelectric. Includes electric and steam generating plants, cogenerating plants, and nuclear plants.
  - Power plant, hydroelectric. Includes all types of hydroelectric power generating plants.
  - Blast furnaces, chemical complexes, etc. Includes coke ovens and mining appurtenances such as tipples and washeries.

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- Sewage treatment plants. Includes sewage treatment and waste disposal plants.
- Water treatment plants. Includes water filtration and water softening plants.
- Urban mass transit. Includes subways, street cars, and light rail systems.
- Railroad construction. Includes the construction of railroad beds, tracks, freight yards, and signal towers for railroad systems, excluding urban mass transit.
- Conservation and development construction. Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
- Dam and reservoir construction. Includes hydroelectric, water supply, and flood control dams and reservoirs.
- Dry and Solid waste disposal. Includes all dry and solid waste disposal sites where nonhazardous waste is buried.
- Harbor and port facilities. Includes docks, piers, and wharves.
- Marine construction. Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
- Petrochemical plants and petroleum refineries. Includes petroleum related facilities.
- Outdoor swimming pools. Includes wading pools and reflecting pools.
- Fencing. Includes all types of fencing, except electronic containment fencing for pets.
- Electronic containment fencing. Includes all types of electronic containment fencing for pets.
- Recreational facilities. Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- Ships. Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
- Oil and gas fields. Includes road construction, land clearing contracting, land moving contracting, and land leveling contracting in oil and gas fields.
- Oil and gas field gathering lines. Includes land clearing contracting, land moving contracting, and land leveling contracting.
- Coal mines. Includes land clearing contracting, land moving contracting, and land leveling contracting.
- Metal mines. Includes land clearing contracting, land moving contracting, and land leveling contracting.
- Nonmetallic mines. Includes land clearing contracting, land moving contracting, and land leveling contracting.
- All other miscellaneous nonbuilding construction. Includes all other types of nonbuilding construction.

#### KINDS OF BUSINESS ACTIVITIES

Includes dollar value of business done by business activity. Primary activities are construction activities that generate fifty-one percent or more of an establishment's dollar value of business done. Also included are other kinds of business activities. Other kinds of business activities include business receipts not reported as value of construction work. This item includes business receipts from retail and wholesale trade, rental of equipment without an operator, manufacturing, transportation, legal services, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included in other kinds of business activities.

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#### VALUE OF CONSTRUCTION WORK FOR SPECIALIZED TYPE AND KIND OF BUSINESS

Includes value of construction work for one of two specialized categories. These categories include types of construction and kind-of-business activity. A construction establishment specializes in a type of construction when fifty-one percent or more of the construction work done is in one construction industry. The construction establishment reports each type of construction it performs as a percent of value of construction work. Types of construction refers to the types of buildings, structures, or facilities constructed or worked on by construction establishments in the reporting year. Specialization in types of construction displays data for establishments with payroll that falls within each percent range of specialization. A construction establishment specializes in a kind-of-business activity when fifty-one percent or more of the construction work done by the establishment is performed in one type of business activity. The construction establishment reports each kind-of-business activity engaged in as a percent of value of construction work. Kindof-business activity refers to the kinds of business activities construction establishments perform throughout the reporting year. Examples of kind-of-business activity include highway and street construction, electrical contracting, carpentry contracting, and concrete contracting. Specialization in kind-of-business activity displays data for establishments with payroll that fall within each percent range of specialization.

#### SPECIALIZATION PERCENT

Includes data for establishments with payroll that fall within each percent range of specialization.

#### VALUE OF CONSTRUCTION WORK FOR ESTABLISHMENTS BY LOCATION OF WORK

This is the value of construction done in particular states by establishment. An establishment can do construction in one or more states.

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# Appendix B. NAICS Codes, Titles, and Descriptions

#### 236117 NEW HOUSING OPERATIVE BUILDERS

This U.S. industry comprises operative builders primarily responsible for the entire construction of new houses and other residential buildings, single-family and multifamily, on their own account for sale. Operative builders are also known as speculative or merchant builders.

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# Appendix C. Methodology

#### **SOURCES OF THE DATA**

The construction sector includes approximately 650,000 establishments that were detemined to be in-scope of the 2002 Economic Census — Construction. This number includes those industries in the North American Industry Classification System (NAICS) definition of construction with at least one paid employee in 2002.

Establishments in the 2002 Economic Census are divided into those sent report forms and those not sent report forms. The coverage of and the method of obtaining census information from each are described below:

1. Establishments sent a report form:

Sample frame establishments. The sample frame consisted of the entire construction universe; there were no subpopulations that were explicitly removed from the sample frame. The sample frame was compiled from a list of all construction companies in the active records of the Internal Revenue Service (IRS) and the Social Security Administration (SSA) that are subject to the payment of Federal Insurance Contributions Act taxes. Under special arrangements, to safeguard their confidentiality, the U.S. Census Bureau obtains information on the location and classification of the companies, as well as their payroll and receipts data from these sources. Unfortunately, these sources do not provide establishment level information for companies with multiple locations. For multilocation companies, the establishment level information is directly obtained from the U.S. Census Bureau's Company Organization Survey. For single-location companies, the IRS-SSA information is generally sufficient for assigning the company to a specific six-digit NAICS industry code.

The 2002 NAICS structure for the construction sector was significantly revised from the 1997 NAICS structure. Initially, only a small proportion of the establishments in the sample frame could be directly assigned a 2002 NAICS industry code with a high degree of confidence. Therefore, a special classification card was mailed to 150,000 construction establishments in early 2002. The goal of this classification card was to obtain the current NAICS industry code prior to assembly of the sample frame for the economic census — construction sample.

- 2. Establishments not sent a report form:
  - a. Nonsample frame establishments. There were a limited number of establishments included in the business register who were completely unclassified at the time of the economic census construction sampling operation. These establishments were mailed a general classification card in early 2003. A portion of these were ultimately determined to be in-scope of the economic census construction. Since this determination was not made until after the sample selection operation had been completed; these establishments were treated as a supplement to the original universe and were sampled independently for inclusion in the derived estimates.
  - b. All nonemployers, i.e., all firms subject to federal income tax, with no paid employees, were also excluded from the 2002 sample frame, as in previous censuses. Nonemployers with significant levels of receipts data were identified and included in the census mailout under the presumption that the nonemployer status may have been incorrect. Those determined to have employees are included in this report. Data for nonemployers are not included in this report, but are released in the annual *Nonemployer Statistics* series.

The report forms used to collect information for establishments in this sector are available at help.econ.census.gov/econhelp/resources/.

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A more detailed examination of census methodology is presented in the *History of the Economic Census* at www.census.gov/econ/www/history.html.

#### **INDUSTRY CLASSIFICATION OF ESTABLISHMENTS**

The classifications for all establishments covered in the 2002 Economic Census — Construction are classified in 1 of 31 industries in accordance with the industry definitions in the *North American Industry Classification System (NAICS)*, *United States*, *2002* manual. Changes between 1997 and 2002 affecting this sector are discussed in the text at the beginning of this report. Tables at www.census.gov/epcd/naics02/n02ton97.htm identify those industries that changed between the 1997 North American Industry Classification System (NAICS) and 2002 NAICS.

In the NAICS system, an industry is generally defined as a group of establishments that use similar processes or have similar business activities. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by construction, value of business done, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the construction sector for 2002, there are 3 subsectors (three-digit NAICS), 10 industry groups (four-digit NAICS), 28 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 31 U.S. industries (six-digit NAICS).

#### **ESTABLISHMENT BASIS OF REPORTING**

The 2002 Economic Census — Construction is conducted on an establishment basis. A construction establishment is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one that has been established for the management of more than one project or job and that is expected to be maintained on a continuing basis. Such establishment activities include, but are not limited to, estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each establishment operated during any part of the census year. The construction sector figures represent a tabulation of records for individual establishments, rather than for companies.

If an establishment was engaged in construction and one or more distinctly different lines of economic activity at the same place of business, it was requested to file a separate report for each activity, provided that the activity was of substantial size and separate records were maintained. If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the value of construction work exceeded the gross receipts from each of its other activities.

The 2002 Economic Census — Construction excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service construction establishments of the same company. These data are published in a separate report series.

#### **DESCRIPTION OF THE SAMPLE FRAME**

The major objective of the sample design was to provide a sample that would provide reliable estimates at the state by industry level. For sample efficiency considerations, the establishments in the initial 2002 construction frame were partitioned into two components for developing estimates within the sample frame. The details of each are described below:

1. Probability-proportionate-to-size (pps) sample. There were three non-overlapping strata for sample selection. An independent sample was selected within each state by industry cell. The details of each stratum were defined as:

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- Stratum 1. This stratum was comprised of approximately 12,000 establishments associated with multilocation companies. The establishments of these multiunit companies were included in the construction sample with certainty.
- Stratum 2. This stratum was comprised of approximately 145,000 single-location companies that could be classified into a valid 2002 NAICS industry. These cases accounted for approximately 75 percent of the payroll associated with single-location companies in construction. The industry code for most of these establishments was determined from the special classification card that was mailed in early 2002. This group was partitioned into state by NAICS (six-digit) cells and an independent sample selected from each cell. Within each cell, a probability-proportionate-to-size (pps) sampling strategy was used. Under this approach, the probability of selection for the sample for larger establishments is higher than for smaller establishments. There were approximately 80,000 establishments selected from this group.
- Stratum 3. This stratum was comprised of the remaining single-location companies. For these companies, we did not have an updated 2002 NAICS industry code. The most recent classification information available for these companies was their 1997 NAICS. Using this 1997 NAICS industry code, this stratum was partitioned into state by NAICS (four-digit) cells; and an independent sample selected from each cell. Again, probability-proportionate-to-size sampling methodology was utilized. There were approximately 30,000 establishments selected from this group.

Subsequent to the initial census mail-out, companies that initiated operations in 2002 were identified via administrative sources. To assure proper representation of the entire in-scope population, simple random samples of these new operations were selected and mailed separately.

2. Estimation and variances. Based on the response data, establishments were assigned to the appropriate NAICS (six-digit) industry. At each level of tabulation, unbiased estimates were derived by summing the weighted establishment data where the establishment sample weight was equal to the inverse of its probability of selection for the construction sample.

The resulting estimates were generated from one of many possible samples and are subject to sampling variability. Estimates of this sample variability were independently derived at all levels of aggregation. These sampling variances were then aggregated to the publication levels for the computation of the relative standard errors.

#### **RELIABILITY OF DATA**

The estimates developed from the sample can differ somewhat from the results of a survey covering all companies in the sample lists, but are otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the construction sector is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically, comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data. They are presented in the form of relative standard errors that are the standard errors divided by the estimated values to which they refer.

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals, or ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples.

The complete-coverage value would be included in the range:

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- From one standard error below to one standard error above the derived estimate for about twothirds of all possible samples.
- From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.
- From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference is that the comparable complete-survey result would fall within the indicated ranges and the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection; reporting; coding; transcription; imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the U.S. Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables of this publication having an associated standard error exceeding 75 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

#### **DUPLICATION IN VALUE OF CONSTRUCTION WORK**

The aggregate of value of construction work reported by all construction establishments in each of the industry, geographic area, or other groupings contains varying amounts of duplication. This is because the construction work of one firm may be subcontracted to other construction firms and may also be included in the subcontractors' value of construction work. Also, part of the value of construction results from the use of products of nonconstruction industries as input materials. These products are counted in the nonconstruction industry, as well as part of the value of construction. Value added avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or geographic areas. Value added for construction industries is defined as the dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

#### **DISCLOSURE**

In accordance with federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at www.census.gov/epcd/ec02/disclosure.htm.

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# Appendix D. Geographic Notes

Not applicable for this report.

## Appendix E. Metropolitan and Micropolitan Statistical Areas

Not applicable for this report.

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# Appendix F. Detailed NAICS and Bridge Code Titles: 2002

[The NAICS code title shown in Table 1 is a standard NAICS title from the North American Industry Classification System Manual. A more detailed title description for the NAICS code shown in Table 1 is included in this appendix

2002 NAICS code	1997 bridge code	Detailed 2002 NAICS and 1997 bridge code title description
236115	23321000	New single family housing construction (except operative builders) Single family housing construction, general contractors
236116	23322000	New multifamily housing construction (except operative builders) Multifamily housing construction, general contractors
236117	23321000 23322000	New housing operative builders Single family housing construction, operative builders Multifamily housing construction, operative builders
236118	23321000 23322000	Residential remodelers Remodeling contractors, single family housing Remodeling contractors, multifamily housing
236210	23331000 23493000 23499000	Industrial building construction Other manufacturing and industrial building construction Other industrial nonbuilding construction Waste disposal plant construction
236220	23322000 23331000 23332000 23599000	Commercial and institutional building construction Barrack and dormitory construction Grain elevators, dry cleaning plants, and manufacturing and industrial warehouses construction Commercial and institutional building construction Indoor swimming pool contractors
237110	23491000 23499000 23581000	Water and sewer line and related structures construction Water and sewer line, mains, and related structures (including pumping stations, etc.) construction Sewage and water treatment plants and irrigation systems construction Water well drilling contractors
237120	21311200 23491000 23493000	Oil and gas pipeline and related structures construction Construction of oil and gas field gathering lines Oil and gas pipelines, mains, and related and related structures (including oil storage tanks, etc) construction Petrochemical plants and refineries construction
237130	23492000 23493000	Power and communication line and related structures construction Power and communication transmission line construction Power generation plants and transformer stations construction, except hydroelectric
237210	23311000	Land subdivision Land subdivision and land development
237310	23411000 23412000 23521000	Highway, street, and bridge construction Highway and street construction Bridge construction Highway and traffic line painting contractors
237990	22412000 23499000 23599000	Other heavy and civil engineering construction Tunnel construction All other heavy and civil engineering construction Anchored earth retention contractors
238110	23571000	Poured concrete foundation and structure contractors Concrete (except paving) contractors
238120	23591000	Structural steel and precast concrete contractors Other structural steel erection contractors
238130	23551000	Framing contractors Framing carpentry contractors
238140	23541000 23542000	Masonry contractors Masonry and stone contractors Stucco contractors
238150	23592000	Glass and glazing contractors Glass and glazing contractors
238160	23561000	Roofing contractors Roofing contractors
238170	23561000	Siding contractors Siding (including gutters and downspouts) contractors
238190	23591000 23599000	Other foundation, structure, and building exterior contractors Metal curtain walls and metal furring installation contractors Forming, ornamental metal work installation, and foundation, structure, and building exterior contractors
238210	23511000 23531000	Electrical contractors Environmental controls installation contractors Electrical contractors
238220	23511000 23595000	Plumbing, heating, and air-conditioning contractors Other plumbing, heating, and air-conditioning contractors Scrubber, dust collection, and other industrial ventilation installation contractors
238290	23595000 23599000	Other building equipment contractors Other building equipment and machinery installation contractors Boiler, duct, and pipe insulation and service station equipment, lightning rod, bowling alley, church bell, and tower clock installation contractors
238310	23542000	Drywall and insulation contractors Other drywall, plastering, acoustical, and insulation contractors
238320	23521000	Painting and wall covering contractors Other painting and wall covering contractors

[The NAICS code title shown in Table 1 is a standard NAICS title from the North American Industry Classification System Manual. A more detailed title description for the NAICS code shown in Table 1 is included in this appendix]

2002 NAICS code	1997 bridge code	Detailed 2002 NAICS and 1997 bridge code title description
238330	23552000	Flooring contractors Floor laying and other floor contractors
238340	23543000	Tile and terrazzo contractors Tile, marble, terrazzo, and mosaic contractors
238350	23551000	Finish carpentry contractors Finish carpentry contractors
238390	23561000 23599000	Other building finishing contractors Sheet metal, except roofing and siding contractors Trade show exhibits installation and dismantling, spectator seating, modular furniture, window covering fixture installation, and other building finishing contractors
238910	21311200 21311300 21311400 21311500 23499000 23593000 23594000 23599000	Site preparation contractors Site preparation and related construction activities for oil and gas operations Site preparation and related construction activities for coal mining Site preparation and related construction activities for metal mining Site preparation and related construction activities for months and related construction activities for nonmetallic mining, except fuels Construction equipment (except cranes) rental with operator and right-of-way clearing and line slashing, blasting, and trenching contractors Excavation contractors Wrecking and demolition contractors Dewatering and core drilling and test boring for construction contractors
238990	23499000 23571000 23599000 56172000	All other specialty trade contractors Crane rental with operator Residential and commercial asphalt, brick, and concrete paving contractors All other special trade contractors Cleaning building exteriors, except sand blasting